

consisting of: SEQ ID NO:65, a degenerate variant of SEQ ID NO:65, and a complement of SEQ ID NO:65.

23. (New) An isolated polynucleotide which hybridizes under stringent conditions to a polynucleotide sequence of the polynucleotide of claim 22.

Sub 24. (New) An isolated antisense nucleic acid molecule comprising at least 15 contiguous nucleotides of the polynucleotide of claim 22.

25. (New) A polynucleotide comprising the nucleotide sequence of an insert contained in a clone deposited as clone number M00001679D:D05 of ATCC Deposit Number 207068.

26. (New) An isolated recombinant host cell containing the polynucleotide of claim 22.

27. (New) An isolated vector comprising the polynucleotide of claim 22.

28. (New) An isolated polypeptide encoded by the polynucleotide of claim 22.

29. (New) A method for producing a polypeptide, the method comprising the steps of:  
culturing a recombinant host cell containing the polynucleotide of claim 22 under conditions suitable for the expression of an encoded polypeptide;  
recovering the polypeptide from the host cell culture.

30. (New) A method for detecting a gene product, wherein the gene product exhibits increased expression in a cancerous mammalian cell relative to a control cell, the method comprising the step of  
detecting a level of gene product expression in a test sample from a test mammalian cell,  
wherein the gene product is encoded by a polynucleotide comprising a sequence of the polynucleotide of claim 22; and

comparing the gene product expression level with an expression level of the gene product in a control sample from a control mammalian cell;

wherein detection of the gene product at a level that is increased in the test sample compared to the control sample cell indicates that the test cell is cancerous.

Sub B4 31. (New) An isolated polynucleotide comprising at least 15 contiguous nucleotides of a nucleotide sequence having at least 90% sequence identity to a sequence selected from the group consisting of: SEQ ID NO:253, a degenerate variant of SEQ ID NO:253, and a complement of SEQ ID NO:253.

32. (New) An isolated polynucleotide which hybridizes under stringent conditions to a polynucleotide sequence of the polynucleotide of claim 31.

Sub B5 33. (New) An isolated antisense nucleic acid molecule comprising at least 15 contiguous nucleotides of the polynucleotide of claim 31.

34. (New) A polynucleotide comprising the nucleotide sequence of an insert contained in a clone deposited as clone number M00001448D:C09 of ATCC Deposit Number 207068.

35. (New) An isolated recombinant host cell containing the polynucleotide of claim 31.

36. (New) An isolated vector comprising the polynucleotide of claim 31.

37. (New) An isolated polypeptide encoded by the polynucleotide of claim 31.

38. (New) A method for producing a polypeptide, the method comprising the steps of:  
culturing a recombinant host cell containing the polynucleotide of claim 31 under conditions suitable for the expression of an encoded polypeptide;  
recovering the polypeptide from the host cell culture.

39. (New) A method for detecting a gene product, wherein the gene product exhibits increased expression in a cancerous mammalian cell relative to a control cell, the method comprising the step of detecting a level of gene product expression in a test sample from a test mammalian cell,

wherein the gene product is encoded by a polynucleotide comprising a sequence of the polynucleotide of claim 31; and

comparing the gene product expression level with an expression level of the gene product in a control sample from a control mammalian cell;

wherein detection of the gene product at a level that is increased in the test sample compared to the control sample cell indicates that the test cell is cancerous.

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40. (New) An isolated polynucleotide comprising at least 15 contiguous nucleotides of a nucleotide sequence having at least 90% sequence identity to a sequence selected from the group consisting of: SEQ ID NO:329, a degenerate variant of SEQ ID NO:329, and a complement of SEQ ID NO:329.

41. (New) An isolated polynucleotide which hybridizes under stringent conditions to a polynucleotide sequence of the polynucleotide of claim 40.

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42. (New) An isolated antisense nucleic acid molecule comprising at least 15 contiguous nucleotides of the polynucleotide of claim 40.

43. (New) A polynucleotide comprising the nucleotide sequence of an insert contained in a clone deposited as clone number M00001616C:F07 of ATCC Deposit Number 207064.

44. (New) An isolated recombinant host cell containing the polynucleotide of claim 40.

45. (New) An isolated vector comprising the polynucleotide of claim 40.

46. (New) An isolated polypeptide encoded by the polynucleotide of claim 40.

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47. (New) A method for producing a polypeptide, the method comprising the steps of:  
culturing a recombinant host cell containing the polynucleotide of claim 40 under conditions suitable for the expression of an encoded polypeptide;  
recovering the polypeptide from the host cell culture.

48. (New) A method for detecting a gene product, wherein the gene product exhibits increased expression in a cancerous mammalian cell relative to a control cell, the method comprising the step of detecting a level of gene product expression in a test sample from a test mammalian cell, wherein the gene product is encoded by a polynucleotide comprising a sequence of the polynucleotide of claim 40; and

comparing the gene product expression level with an expression level of the gene product in a control sample from a control mammalian cell;

wherein detection of the gene product at a level that is increased in the test sample compared to the control sample cell indicates that the test cell is cancerous.

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49. (New) An isolated polynucleotide comprising at least 15 contiguous nucleotides of a nucleotide sequence having at least 90% sequence identity to a sequence selected from the group consisting of: SEQ ID NO:739, a degenerate variant of SEQ ID NO:739, and a complement of SEQ ID NO:739.

50. (New) An isolated polynucleotide which hybridizes under stringent conditions to a polynucleotide sequence of the polynucleotide of claim 49.

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51. (New) An isolated antisense nucleic acid molecule comprising at least 15 contiguous nucleotides of the polynucleotide of claim 49.

52. (New) A polynucleotide comprising the nucleotide sequence of an insert contained in a clone deposited as clone number M00001460C:H02 of ATCC Deposit Number 207075.

53. (New) An isolated recombinant host cell containing the polynucleotide of claim 49.

54. (New) An isolated vector comprising the polynucleotide of claim 49.

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55. (New) An isolated polypeptide encoded by the polynucleotide of claim 49.

56. (New) A method for producing a polypeptide, the method comprising the steps of:  
culturing a recombinant host cell containing the polynucleotide of claim 49 under conditions  
suitable for the expression of an encoded polypeptide;  
recovering the polypeptide from the host cell culture.

57. (New) A method for detecting a gene product, wherein the gene product exhibits increased  
expression in a cancerous mammalian cell relative to a control cell, the method comprising the step of  
detecting a level of gene product expression in a test sample from a test mammalian cell,  
wherein the gene product is encoded by a polynucleotide comprising a sequence of the polynucleotide  
of claim 49; and  
comparing the gene product expression level with an expression level of the gene product in a  
control sample from a control mammalian cell;  
wherein detection of the gene product at a level that is increased in the test sample compared to  
the control sample cell indicates that the test cell is cancerous.

*Sub 58* 58. (New) An isolated polynucleotide comprising at least 15 contiguous nucleotides of a  
nucleotide sequence having at least 90% sequence identity to a sequence selected from the group  
consisting of: SEQ ID NO:1186, a degenerate variant of SEQ ID NO:1186, and a complement of SEQ  
ID NO:1186.

*59* 59. (New) An isolated polynucleotide which hybridizes under stringent conditions to a  
polynucleotide sequence of the polynucleotide of claim 58.

*Sub 60* 60. (New) An isolated antisense nucleic acid molecule comprising at least 15 contiguous  
nucleotides of the polynucleotide of claim 58.

61. (New) A polynucleotide comprising the nucleotide sequence of an insert contained in a  
clone deposited as clone number M00001578C:G06 of ATCC Deposit Number 207065.

*62* 62. (New) An isolated recombinant host cell containing the polynucleotide of claim 58.

63. (New) An isolated vector comprising the polynucleotide of claim 58.

64. (New) An isolated polypeptide encoded by the polynucleotide of claim 58.

65. (New) A method for producing a polypeptide, the method comprising the steps of:  
culturing a recombinant host cell containing the polynucleotide of claim 58 under conditions  
suitable for the expression of an encoded polypeptide;  
recovering the polypeptide from the host cell culture.

66. (New) A method for detecting a gene product, wherein the gene product exhibits increased  
expression in a cancerous mammalian cell relative to a control cell, the method comprising the step of  
detecting a level of gene product expression in a test sample from a test mammalian cell,  
wherein the gene product is encoded by a polynucleotide comprising a sequence of the polynucleotide  
of claim 58; and  
comparing the gene product expression level with an expression level of the gene product in a  
control sample from a control mammalian cell;  
wherein detection of the gene product at a level that is increased in the test sample compared to  
the control sample cell indicates that the test cell is cancerous.

Sub 8012 67. (New) An isolated polynucleotide comprising at least 15 contiguous nucleotides of a  
nucleotide sequence having at least 90% sequence identity to a sequence selected from the group  
consisting of: SEQ ID NO:1780, a degenerate variant of SEQ ID NO:1780, and a complement of SEQ  
ID NO:1780.

68. (New) An isolated polynucleotide which hybridizes under stringent conditions to a  
polynucleotide sequence of the polynucleotide of claim 67.

Sub 8013 69. (New) An isolated antisense nucleic acid molecule comprising at least 15 contiguous  
nucleotides of the polynucleotide of claim 67.

AI 70. (New) A polynucleotide comprising the nucleotide sequence of an insert contained in a

clone deposited as clone number M00001450A:B03 of ATCC Deposit Number 207071.

71. (New) An isolated recombinant host cell containing the polynucleotide of claim 67.

72. (New) An isolated vector comprising the polynucleotide of claim 67.

73. (New) An isolated polypeptide encoded by the polynucleotide of claim 67.

74. (New) A method for producing a polypeptide, the method comprising the steps of:  
culturing a recombinant host cell containing the polynucleotide of claim 67 under conditions  
suitable for the expression of an encoded polypeptide;  
recovering the polypeptide from the host cell culture.

75. (New) A method for detecting a gene product, wherein the gene product exhibits increased  
expression in a cancerous mammalian cell relative to a control cell, the method comprising the step of  
detecting a level of gene product expression in a test sample from a test mammalian cell,  
wherein the gene product is encoded by a polynucleotide comprising a sequence of the polynucleotide  
of claim 67; and

comparing the gene product expression level with an expression level of the gene product in a  
control sample from a control mammalian cell;

wherein detection of the gene product at a level that is increased in the test sample compared to  
the control sample cell indicates that the test cell is cancerous.

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76. (New) An isolated polynucleotide comprising at least 15 contiguous nucleotides of a  
nucleotide sequence having at least 90% sequence identity to a sequence selected from the group  
consisting of: SEQ ID NO:1899, a degenerate variant of SEQ ID NO:1899, and a complement of SEQ  
ID NO:1899.

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77. (New) An isolated polynucleotide which hybridizes under stringent conditions to a  
polynucleotide sequence of the polynucleotide of claim 76.

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78. (New) An isolated antisense nucleic acid molecule comprising at least 15 contiguous nucleotides of the polynucleotide of claim 76.

79. (New) A polynucleotide comprising the nucleotide sequence of an insert contained in a clone deposited as clone number M00001451B:F01 of ATCC Deposit Number 207071.

80.. (New) An isolated recombinant host cell containing the polynucleotide of claim 76.

81. (New) An isolated vector comprising the polynucleotide of claim 76.

82. (New) An isolated polypeptide encoded by the polynucleotide of claim 76.

83. (New) A method for producing a polypeptide, the method comprising the steps of:  
culturing a recombinant host cell containing the polynucleotide of claim 76 under conditions suitable for the expression of an encoded polypeptide;  
recovering the polypeptide from the host cell culture.

84. (New) A method for detecting a gene product, wherein the gene product exhibits increased expression in a cancerous mammalian cell relative to a control cell, the method comprising the step of detecting a level of gene product expression in a test sample from a test mammalian cell, wherein the gene product is encoded by a polynucleotide comprising a sequence of the polynucleotide of claim 76; and

comparing the gene product expression level with an expression level of the gene product in a control sample from a control mammalian cell;

wherein detection of the gene product at a level that is increased in the test sample compared to the control sample cell indicates that the test cell is cancerous.

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85. (New) An isolated polynucleotide comprising at least 15 contiguous nucleotides of a nucleotide sequence having at least 90% sequence identity to a sequence selected from the group consisting of: SEQ ID NO:1938, a degenerate variant of SEQ ID NO:1938, and a complement of SEQ ID NO:1938.



86. (New) An isolated polynucleotide which hybridizes under stringent conditions to a polynucleotide sequence of the polynucleotide of claim 85.

Sub B17 87. (New) An isolated antisense nucleic acid molecule comprising at least 15 contiguous nucleotides of the polynucleotide of claim 85.

88. (New) A polynucleotide comprising the nucleotide sequence of an insert contained in a clone deposited as clone number M00003879D:A08 of ATCC Deposit Number 207066.

89. (New) An isolated recombinant host cell containing the polynucleotide of claim 85.

90. (New) An isolated vector comprising the polynucleotide of claim 85.

91. (New) An isolated polypeptide encoded by the polynucleotide of claim 85.

92. (New) A method for producing a polypeptide, the method comprising the steps of:  
culturing a recombinant host cell containing the polynucleotide of claim 85 under conditions suitable for the expression of an encoded polypeptide;  
recovering the polypeptide from the host cell culture.

93. (New) A method for detecting a gene product, wherein the gene product exhibits increased expression in a cancerous mammalian cell relative to a control cell, the method comprising the step of detecting a level of gene product expression in a test sample from a test mammalian cell, wherein the gene product is encoded by a polynucleotide comprising a sequence of the polynucleotide of claim 85; and

comparing the gene product expression level with an expression level of the gene product in a control sample from a control mammalian cell;

wherein detection of the gene product at a level that is increased in the test sample compared to the control sample cell indicates that the test cell is cancerous.

Sub B18 94. (New) An isolated polynucleotide comprising at least 15 contiguous nucleotides of a nucleotide sequence having at least 90% sequence identity to a sequence selected from the group consisting of: SEQ ID NO:1998, a degenerate variant of SEQ ID NO:1998, and a complement of SEQ ID NO:1998.

95. (New) An isolated polynucleotide which hybridizes under stringent conditions to a polynucleotide sequence of the polynucleotide of claim 94.

Sub B19 96. (New) An isolated antisense nucleic acid molecule comprising at least 15 contiguous nucleotides of the polynucleotide of claim 94.

97. (New) A polynucleotide comprising the nucleotide sequence of an insert contained in a clone deposited as clone number M00001630D:H10 of ATCC Deposit Number 207065.

98. (New) An isolated recombinant host cell containing the polynucleotide of claim 94.

99. (New) An isolated vector comprising the polynucleotide of claim 94.

100. (New) An isolated polypeptide encoded by the polynucleotide of claim 94.

101. (New) A method for producing a polypeptide, the method comprising the steps of:  
culturing a recombinant host cell containing the polynucleotide of claim 94 under conditions suitable for the expression of an encoded polypeptide;  
recovering the polypeptide from the host cell culture.

AI 102. (New) A method for detecting a gene product, wherein the gene product exhibits increased expression in a cancerous mammalian cell relative to a control cell, the method comprising the step of detecting a level of gene product expression in a test sample from a test mammalian cell, wherein the gene product is encoded by a polynucleotide comprising a sequence of the polynucleotide of claim 94; and  
comparing the gene product expression level with an expression level of the gene product in a

control sample from a control mammalian cell;

wherein detection of the gene product at a level that is increased in the test sample compared to the control sample cell indicates that the test cell is cancerous.

Sub 5820 103. (New) An isolated polynucleotide comprising at least 15 contiguous nucleotides of a nucleotide sequence having at least 90% sequence identity to a sequence selected from the group consisting of: SEQ ID NO:2007, a degenerate variant of SEQ ID NO:2007, and a complement of SEQ ID NO:2007.

104. (New) An isolated polynucleotide which hybridizes under stringent conditions to a polynucleotide sequence of the polynucleotide of claim 103.

Sub 5821 105. (New) An isolated antisense nucleic acid molecule comprising at least 15 contiguous nucleotides of the polynucleotide of claim 103.

106. (New) A polynucleotide comprising the nucleotide sequence of an insert contained in a clone deposited as clone number M00001639A:C11 of ATCC Deposit Number 207065.

107. (New) An isolated recombinant host cell containing the polynucleotide of claim 103.

108. (New) An isolated vector comprising the polynucleotide of claim 103.

109. (New) An isolated polypeptide encoded by the polynucleotide of claim 103.

110. (New) A method for producing a polypeptide, the method comprising the steps of:  
culturing a recombinant host cell containing the polynucleotide of claim 103 under conditions suitable for the expression of an encoded polypeptide;  
recovering the polypeptide from the host cell culture.

A1 111. (New) A method for detecting a gene product, wherein the gene product exhibits increased expression in a cancerous mammalian cell relative to a control cell, the method comprising the step of

detecting a level of gene product expression in a test sample from a test mammalian cell,  
wherein the gene product is encoded by a polynucleotide comprising a sequence of the polynucleotide  
of claim 103; and

comparing the gene product expression level with an expression level of the gene product in a  
control sample from a control mammalian cell;

wherein detection of the gene product at a level that is increased in the test sample compared to  
the control sample cell indicates that the test cell is cancerous. --

**REMARKS**

**Formal Matters**

Claims 22-111 are pending after entry of the amendments set forth above.

Claims 1-21 are canceled without prejudice to renewal, and without intent to abandon any  
subject matter contained therein. Applicants expressly reserve the right to pursue the subject matter of  
the canceled claims in a continuing application.

The specification is amended to replace the initial Sequence Listing with the enclosed substitute  
Sequence Listing.

Support for new claims 22-111 is found throughout the specification, including in the claims as  
originally filed. The table below summarizes the general subject matter of each claim, and provides  
exemplary support in the specification.

Claims	Exemplary Support in the Specification
22-25; 31-34; 41-44; 49-52; 58-61; 67-70; 76-79; 85-88; 94-97; 103-106 (polynucleotides)	Page 5, line 29 to page 10, line 19; original claims 9-10 and 15.
26-27; 35-36; 45-46; 53-54; 62-63; 71-72; 80-81; 89-90; 98-99; 106-107 (recombinant host cells, vectors)	Original claims 11 and 14.
28-29; 37-38; 47-48; 55-56; 64-65; 73-74; 82-83; 91-92; 100-101; 108-109 (polypeptides; method of making)	Original claim 12 and page 14, line 24 to page 16, line 15.
30, 39, 48, 57, 66, 75, 84, 93, 102, 110 (detection methods)	Original claims 16-21.

No new matter is added.